

base

HCAPLUS, REG SEARCH

DES I AVAILABLE COPY

LEE 09/413,381

=> d his

(FILE 'HOME' ENTERED AT 17:59:34 ON 26 JUL 2000)

FILE 'HCAPLUS' ENTERED AT 17:59:42 ON 26 JUL 2000

L1 31 S SEEGER P2/AU
L2 9 S PLANTE O7/AU
L3 8 S L1 AND L2
SELECT RN L3 1-8

FILE 'REGISTRY' ENTERED AT 18:00:43 ON 26 JUL 2000
L4 82 S E1-82

FILE 'HCAPLUS' ENTERED AT 18:01:05 ON 26 JUL 2000

~~L5 4 S E1-82 AND L4 4 S E1-82~~ 4 cites w/ cpds
~~L6 4 S E1-82 AND L4 4 S E1-82~~ 4 cites no cpds

FILE 'REGISTRY' ENTERED AT 18:06:53 ON 26 JUL 2000

L7 STR
L8 SCREEN 1838 AND 2016
L9 50 S L7 AND L8
L10 5213 S E1-82 AND L8 50 S L7 AND L8
SAVE L10 LEE381P/A
L11 STR L7
L12 50 S L11 SSS SAM SUB=L10
L13 4236 S E1-82 AND L11 50 S L11 SSS SAM SUB=L10

FILE 'HCAPLUS' ENTERED AT 18:18:04 ON 26 JUL 2000

L14 8149 S L13 8149 cites
L15 217941 S LIBRAR? OR COMBINATOR? OR (SOLID(W) (PHASE OR SUPPORT OR STATE
L16 26 S L14(L) L15 24 cites related to combinator? etc

~~L17 228 S L14(L) GLYCOSYL?~~
L18 228 S L14(L) GLYCOSYL?
L19 417 S GLYCOSYL?(4A) SUBSTRATE
L20 5 S L19(L) L14
L21 5 S L20 NOT L3

~~L22 5 S L20 NOT L3~~ 5 cites related to glycosylation

L23 5 S L14 AND L20
L24 0 S L23 NOT L22
L25 66 S L14(L) (DONAT? OR DON###)
L26 11758 S PHOSPH?(4A) TRANSFER?
L27 4388 S PHOSPH?(4A) (DONAT? OR DON###)
L28 361 S L14 AND (L25 OR L26 OR L27)
L29 106 S L14(L) (L25 OR L26 OR L27)
L30 24 S L29(L) GLYCOSY?
L31 50708 S TRIFLATE OR SULFONATE
L32 0 S L30 AND L31
L33 0 S L29 AND L31
L34 0 S L25 AND L31
L35 16451 S LEWIS ACID
L36 0 S L35 AND L30
L37 0 S L28 AND L36
L38 0 S L25 AND (L31 OR L35)
L39 24 S L30 NOT L23
L40 23 S L39 NOT L23 23 sites related to glycosylation

FILE 'REGISTRY' ENTERED AT 18:38:56 ON 26 JUL 2000

L41 STR L7
L42 50 S L41
L43 STR L41
L44 16 S L43
L45 5539 S L43 AND L41 16 S L43
SAVE L45 LEE381P2/A
SAVE L13 LEE381S/A

FILE 'HCAPLUS' ENTERED AT 18:42:42 ON 26 JUL 2000

L46 6272 S L45
L47 58 S L46 AND L14
L48 783 S L14(L) SPN/RL

SEARCHED BY SUSAN HANLEY 305-4053

LEE 09/413,381

L49 30 S L48 AND L45
L50 4 S L49 AND (OXID? OR PERSULFAT? OR ?OXIRAN? OR EPOXID? OR ?CARBO
L51 26 S L50 NOT L51
L52 26 S L49 NOT L51
L53 23 S L52 NOT L53

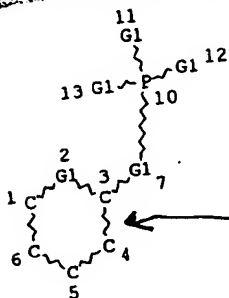
4 cites

23 cites

> prep of



parent STR

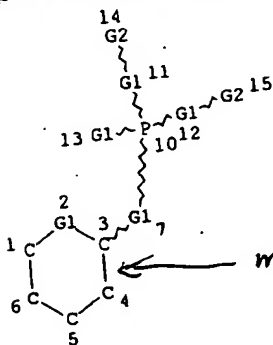


any type of bonding

GRAPH ATTRIBUTES:

STEREO ATTRIBUTES: NONE
SCR 183

STEREO ATTRIBUTES: NONE
L8 SCR 1838 AND 2016
L10 5213 SEA FILE=REGISTRY SSS FUL L7 AND L8
~~CONFIDENTIAL~~



must be single exact bonding

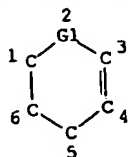
GRAPH ATTRIBUTES:

STEREO ATTRIBUTES: NONE
L13 4236 SEA FILE=REGISTRY SUB=L10 SSS FUL L11
L14 8149 SEA FILE=HCAPLUS ABB=ON PLU=ON L13

Structure: 146

L43 STR

STRUCTURE for starting material



VAR G1=O/S/N
 NODE ATTRIBUTES:
 CONNECT IS E2 RC AT 3
 CONNECT IS E2 RC AT 4
 DEFAULT MLEVEL IS ATOM
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
 RSPEC I
 NUMBER OF NODES IS 6

STEREO ATTRIBUTES: NONE
 L45 5539 SEA FILE=REGISTRY SSS FUL L43
 L46 6272 SEA FILE=HCAPLUS ABB=ON PLU=ON L45

*Inventors
work*

=> d bib abs hitstr 15 1

ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2000 ACS
 AN 2000:241242 HCAPLUS

DN 132:251369

TI Combinatorial synthesis of oligosaccharide phosphates via glycosidation reaction

IN Seeberger, Peter B.; Plante, Obadiah J.

PA Massachusetts Institute of Technology, USA

SO PCT Int. Appl., 92 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000020428	A2	20000413	WO 1999-US23292	19991006

W: CA, JP

RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE

PRAI US 1998-103291 19981006

OS MARPAT 132:251369

GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB One aspect of the present invention relates to differentially protected glycosyl phosphates in prepn. of oligosaccharide phosphates I wherein X represents O, NR1, or S; Y represents independently for each occurrence O, NR1, or S; Z represents independently for each occurrence O, NR1, or S; R is selected, independently for each occurrence, from the group consisting of H, alkyl, heteroalkyl, aryl, aralkyl, heteroaryl, and heteroaralkyl; R1 is selected, independently for each occurrence, from the group consisting of H, alkyl, heteroalkyl, aryl, aralkyl, heteroaryl, heteroaralkyl, acyl, and sulfonyl; R2, R3, and R4 are independently selected from the group consisting of R, OR1, SR1, amine, OSO3H, OPO3H2; R5 is selected from the group consisting of R, (CR2)nOR1, (CR2)nSR1; and n is an integer selected from the range 0 to 10 inclusive. Another aspect of the present invention relates to the prepn. of glycosyl phosphates from glycal precursors. In another aspect of the present invention, glycosyl phosphates are used as glycosyl donors in glycosylation reactions. Thus, trisaccharide II was prepd. via glycosidation reaction with glycal.

IT 226919-62-6P 226919-63-7P 226919-64-8P
 226919-65-9P 226919-67-1P 226919-68-2P
 226919-72-8P 226919-78-4P 226919-79-5P
 226919-81-9P 226919-83-1P 226919-84-2P

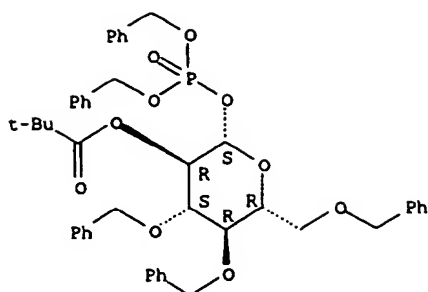
RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)

(combinatorial synthesis of oligosaccharide phosphates via glycosidation reaction)

RN 226919-62-6 HCAPLUS

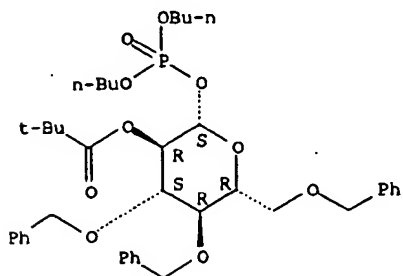
CN .beta.-D-Glucopyranose, 3,4,6-tris-O-(phenylmethyl)-, 1-(bis(phenylmethyl) phosphate) 2-(2,2-dimethylpropanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



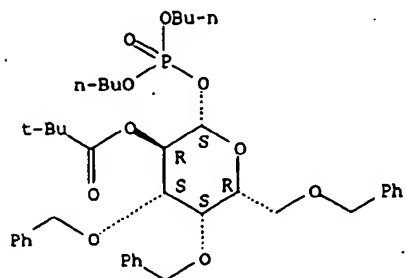
RN 226919-63-7 HCAPLUS
 CN .beta.-D-Glucopyranose, 3,4,6-tris-O-(phenylmethyl)-, 1-(dibutyl phosphate) 2-(2,2-dimethylpropanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



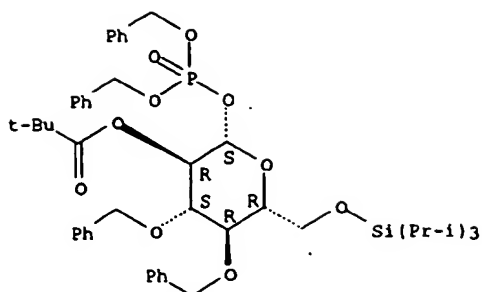
RN 226919-64-8 HCAPLUS
 CN .beta.-D-Galactopyranose, 3,4,6-tris-O-(phenylmethyl)-, 1-(dibutyl phosphate) 2-(2,2-dimethylpropanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



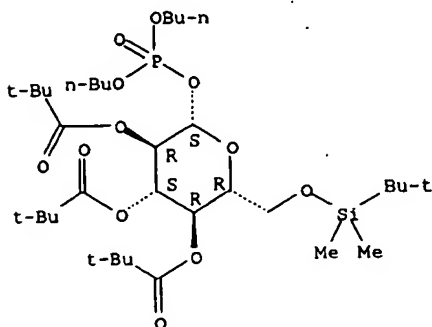
RN 226919-65-9 HCAPLUS
 CN .beta.-D-Glucopyranose, 3,4-bis-O-(phenylmethyl)-6-O-(tris(1-methylethyl)silyl)-, 1-(bis(phenylmethyl) phosphate) 2-(2,2-dimethylpropanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



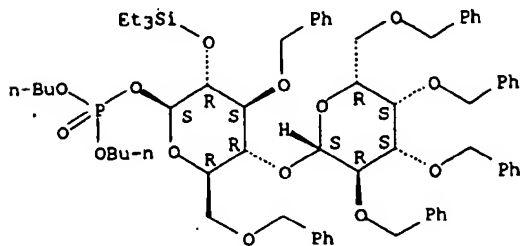
RN 226919-67-1 HCAPLUS
 CN .beta.-D-Glucopyranose, 6-O-[(1,1-dimethylethyl)dimethylsilyl]-, 1-(dibutyl phosphate) 2,3,4-tris(2,2-dimethylpropanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



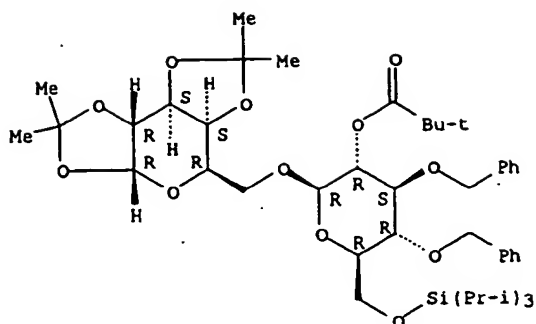
RN 226919-68-2 HCAPLUS
 CN .beta.-D-Glucopyranose, 3,6-bis-O-(phenylmethyl)-4-O-[2,3,4,6-tetrakis-O-(phenylmethyl)-.beta.-D-galactopyranosyl]-2-O-(triethylsilyl)-, dibutyl phosphate (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



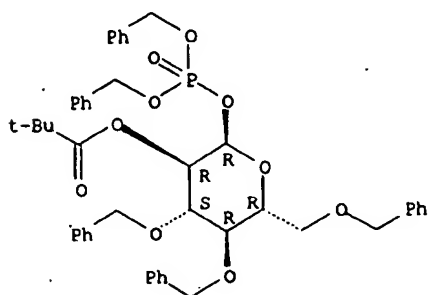
RN 226919-72-8 HCAPLUS
 CN .alpha.-D-Galactopyranose, 6-O-[2-O-(2,2-dimethyl-1-oxopropyl)-3,4-bis-O-(phenylmethyl)-6-O-[tris(1-methylethyl)silyl]-.beta.-D-glucopyranosyl]-1,2:3,4-bis-O-(1-methylethylidene)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



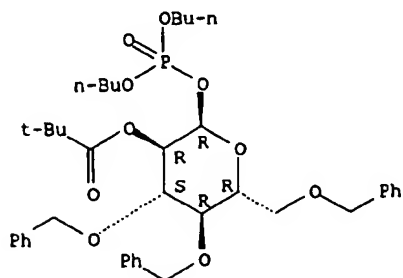
RN 226919-78-4 HCAPLUS
 CN .alpha.-D-Glucopyranose, 3,4,6-tris-O-(phenylmethyl)-,
 1-[bis(phenylmethyl) phosphate] 2-(2,2-dimethylpropanoate) (9CI) (CA
 INDEX NAME)

Absolute stereochemistry. Rotation (+).



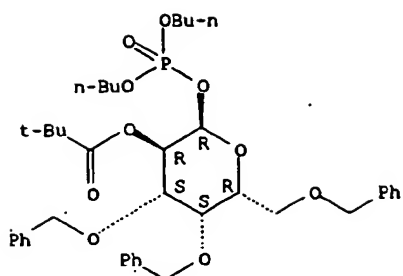
RN 226919-79-5 HCAPLUS
 CN .alpha.-D-Glucopyranose, 3,4,6-tris-O-(phenylmethyl)-, 1-(dibutyl
 phosphate) 2-(2,2-dimethylpropanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



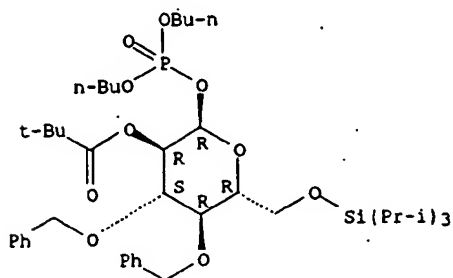
RN 226919-81-9 HCAPLUS
 CN .alpha.-D-Galactopyranose, 3,4,6-tris-O-(phenylmethyl)-, 1-(dibutyl
 phosphate) 2-(2,2-dimethylpropanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



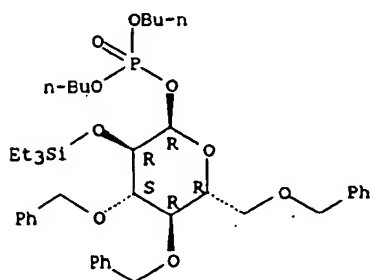
RN 226919-83-1 HCAPLUS
 CN .alpha.-D-Glucopyranose, 3,4-bis-O-(phenylmethyl)-6-O-[tris(1-methylethyl)silyl]-, 1-(dibutyl phosphate) 2-(2,2-dimethylpropanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RN 226919-84-2 HCAPLUS
 CN .alpha.-D-Glucopyranose, 3,4,6-tris-O-(phenylmethyl)-2-O-(triethylsilyl)-, dibutyl phosphate (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



IT 75-08-1, Thioethanol 582-52-5 2465-65-8
 4064-06-6 33494-81-4 40246-30-8
 55628-54-1 145852-76-2 226919-69-3
 226919-70-6 262436-84-0

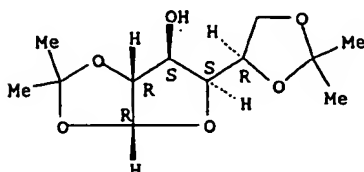
RL: RCT (Reactant)
 (combinatorial synthesis of oligosaccharide phosphates via glycosidation reaction)

RN 75-08-1 HCAPLUS
 CN Ethanethiol (8CI, 9CI) (CA INDEX NAME)

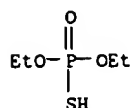
H₃C-CH₂-SH

RN 582-52-5 HCAPLUS
 CN .alpha.-D-Glucofuranose, 1,2:5,6-bis-O-(1-methylethylidene)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

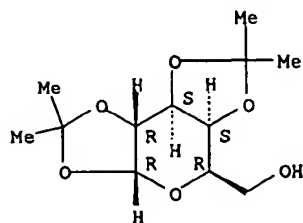


RN 2465-65-8 HCAPLUS
 CN Phosphorothioic acid, O,O-diethyl ester (8CI, 9CI) (CA INDEX NAME)

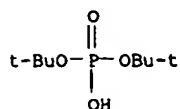


RN 4064-06-6 HCAPLUS
 CN .alpha.-D-Galactopyranose, 1,2:3,4-bis-O-(1-methylethylidene)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

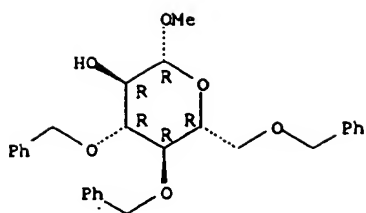


RN 33494-81-4 HCAPLUS
 CN Phosphoric acid, bis(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)



RN 40246-30-8 HCAPLUS
 CN .beta.-D-Glucopyranoside, methyl 3,4,6-tris-O-(phenylmethyl)- (9CI) (CA INDEX NAME)

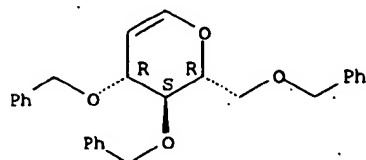
Absolute stereochemistry.



RN 55628-54-1 HCAPLUS

CN D-arabino-Hex-1-enitol, 1,5-anhydro-2-deoxy-3,4,6-tris-O-(phenylmethyl)-
(9CI) (CA INDEX NAME)

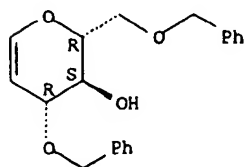
Absolute stereochemistry. Rotation (-).



RN 145852-76-2 HCAPLUS

CN D-arabino-Hex-1-enitol, 1,5-anhydro-2-deoxy-3,6-bis-O-(phenylmethyl)-
(9CI) (CA INDEX NAME)

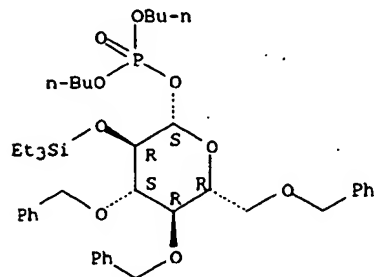
Absolute stereochemistry.



RN 226919-69-3 HCAPLUS

CN .beta.-D-Glucopyranose, 3,4,6-tris-O-(phenylmethyl)-2-O-(triethylsilyl)-,
dibutyl phosphate (9CI) (CA INDEX NAME)

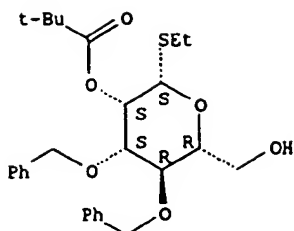
Absolute stereochemistry. Rotation (-).



RN 226919-70-6 HCAPLUS

CN .beta.-D-Mannopyranoside, ethyl 3,4-bis-O-(phenylmethyl)-1-thio-,
2-(2,2-dimethylpropanoate) (9CI) (CA INDEX NAME)

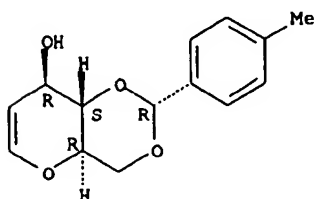
Absolute stereochemistry.



RN 262436-84-0 HCAPLUS

CN D-arabino-Hex-1-enitol, 1,5-anhydro-2-deoxy-4,6-O-[(R)-(4-methylphenyl)methylene]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 40246-33-1P 201210-64-2P 219122-26-6P

219122-30-2P 226919-66-0P 226919-71-7P

226919-73-9P 226919-76-2P 262590-82-9P

262590-83-0P 262590-84-1P 262590-85-2P

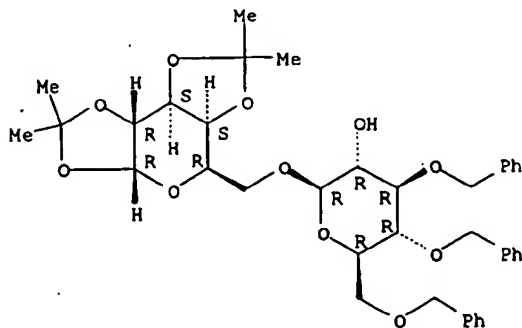
262590-86-3P 262590-87-4P 262590-88-5P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(combinatorial synthesis of oligosaccharide phosphates via
glycosidation reaction)

RN 40246-33-1 HCAPLUS

CN .alpha.-D-Galactopyranose, 1,2:3,4-bis-O-(1-methylethylidene)-6-O-[3,4,6-tris-O-(phenylmethyl)-.beta.-D-glucopyranosyl]- (9CI) (CA INDEX NAME)

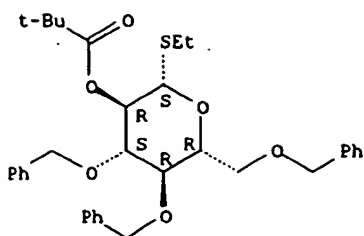
Absolute stereochemistry. Rotation (-).



RN 201210-64-2 HCAPLUS

CN .beta.-D-Glucopyranoside, ethyl 3,4,6-tris-O-(phenylmethyl)-1-thio-,
2,2-dimethylpropanoate (9CI) (CA INDEX NAME)

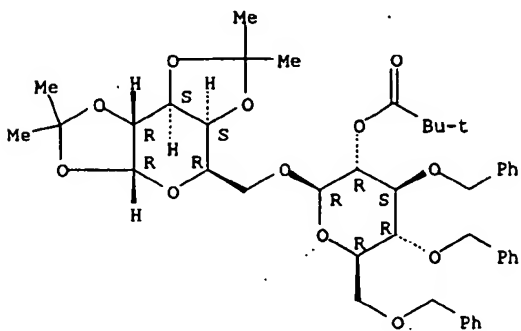
Absolute stereochemistry.



RN 219122-26-6 HCAPLUS

CN .alpha.-D-Galactopyranose, 6-O-[2-O-(2,2-dimethyl-1-oxopropyl)-3,4,6-tris-O-(phenylmethyl)-.beta.-D-glucopyranosyl]-1,2:3,4-bis-O-(1-methylethylidene)- (9CI) (CA INDEX NAME)

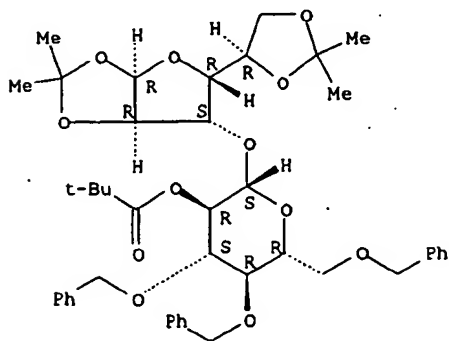
Absolute stereochemistry. Rotation (-).



RN 219122-30-2 HCAPLUS

CN .alpha.-D-Glucofuranose, 3-O-[2-O-(2,2-dimethyl-1-oxopropyl)-3,4,6-tris-O-(phenylmethyl)-.beta.-D-glucopyranosyl]-1,2:5,6-bis-O-(1-methylethylidene)- (9CI) (CA INDEX NAME)

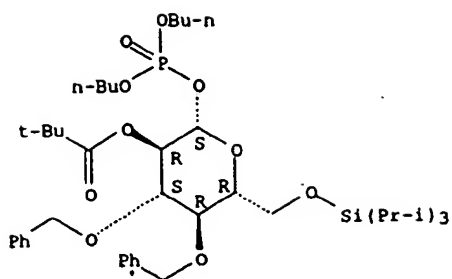
Absolute stereochemistry. Rotation (-).



RN 226919-66-0 HCAPLUS

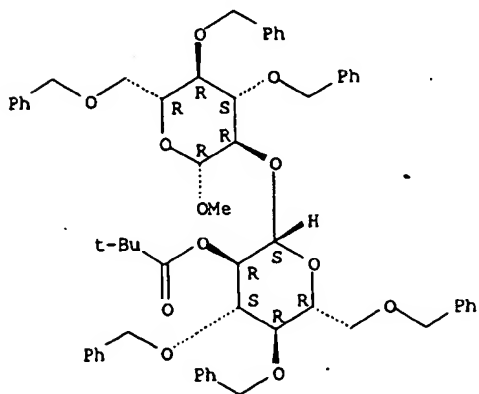
CN .beta.-D-Glucopyranose, 3,4-bis-O-(phenylmethyl)-6-O-[tris(1-methylethyl)silyl]-, 1-(dibutyl phosphate) 2-(2,2-dimethylpropanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



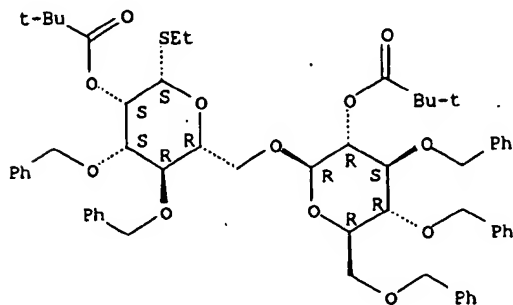
RN 226919-71-7 HCAPLUS
 CN .beta.-D-Glucopyranoside, methyl 2-O-(2-O-(2,2-dimethyl-1-oxopropyl)-3,4,6-tris-O-(phenylmethyl)-.beta.-D-glucopyranosyl)-3,4,6-tris-O-(phenylmethyl)-(9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



RN 226919-73-9 HCAPLUS
 CN .beta.-D-Mannopyranoside, ethyl 6-O-(2-O-(2,2-dimethyl-1-oxopropyl)-3,4,6-tris-O-(phenylmethyl)-.beta.-D-glucopyranosyl)-3,4-bis-O-(phenylmethyl)-1-thio-, 2,2-dimethylpropanoate (9CI) (CA INDEX NAME)

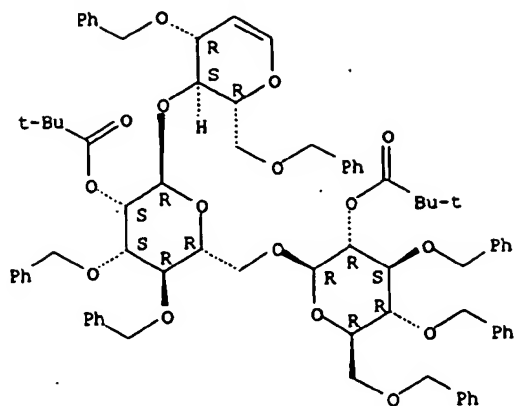
Absolute stereochemistry. Rotation (-).



RN 226919-76-2 HCAPLUS
 CN D-arabino-Hex-1-enitol, O-2-O-(2,2-dimethyl-1-oxopropyl)-3,4,6-tris-O-(phenylmethyl)-.beta.-D-glucopyranosyl-(1.fwdarw.6)-O-2-O-(2,2-dimethyl-1-oxopropyl)-3,4-bis-O-(phenylmethyl)-.alpha.-D-mannopyranosyl-(1.fwdarw.4)-1,5-anhydro-2-deoxy-3,6-bis-O-(phenylmethyl)- (9CI) (CA INDEX NAME)

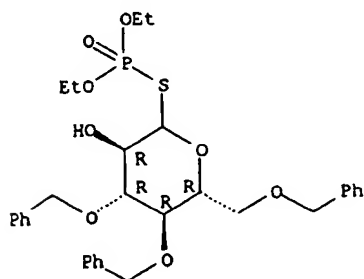
SEARCHED BY SUSAN HANLEY 305-4053

Absolute stereochemistry. Rotation (-).



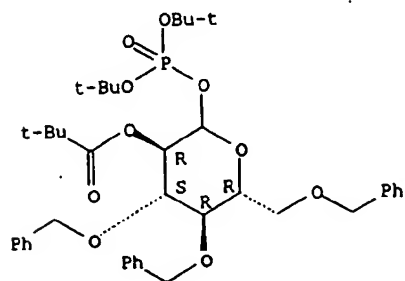
RN 262590-82-9 HCAPLUS
CN D-Glucopyranose, 3,4,6-tris-O-(phenylmethyl)-1-thio-, 1-(diethyl phosphate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.



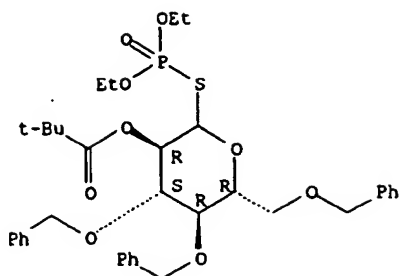
RN 262590-83-0 HCAPLUS
CN D-Glucopyranose, 3,4,6-tris-O-(phenylmethyl)-, 1-[bis(1,1-dimethylethyl) phosphate] 2-(2,2-dimethylpropanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.



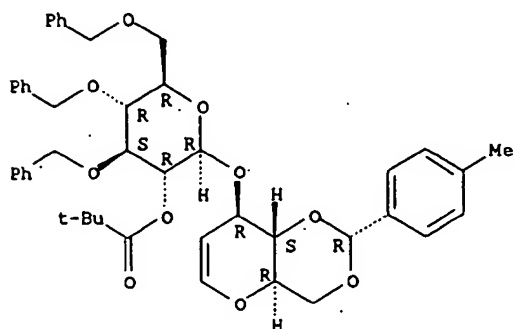
RN 262590-84-1 HCAPLUS
CN D-Glucopyranose, 3,4,6-tris-O-(phenylmethyl)-1-thio-, 1-(diethyl phosphate) 2-(2,2-dimethylpropanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.



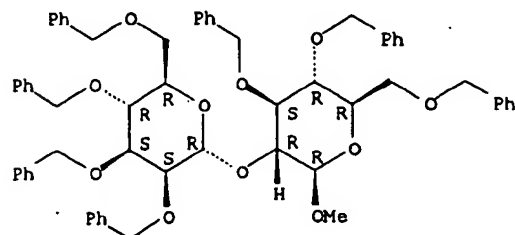
RN 262590-85-2 HCAPLUS
 CN D-arabino-Hex-1-enitol, 1,5-anhydro-2-deoxy-3-O-[2-O-(2,2-dimethyl-1-oxopropyl)-3,4,6-tris-O-(phenylmethyl)-.beta.-D-glucopyranosyl]-4,6-O-[(R)-(4-methylphenyl)methylene]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 262590-86-3 HCAPLUS
 CN .beta.-D-Glucopyranoside, methyl 3,4,6-tris-O-(phenylmethyl)-2-O-[2,3,4,6-tetrakis-O-(phenylmethyl)-.alpha.-D-mannopyranosyl]- (9CI) (CA INDEX NAME)

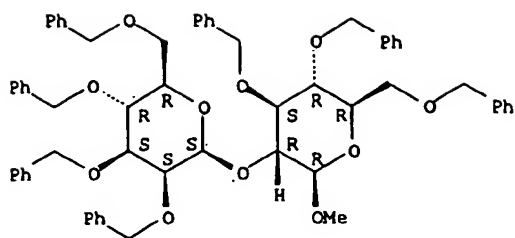
Absolute stereochemistry.



RN 262590-87-4 HCAPLUS
 CN .beta.-D-Glucopyranoside, methyl 3,4,6-tris-O-(phenylmethyl)-2-O-[2,3,4,6-tetrakis-O-(phenylmethyl)-.beta.-D-mannopyranosyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

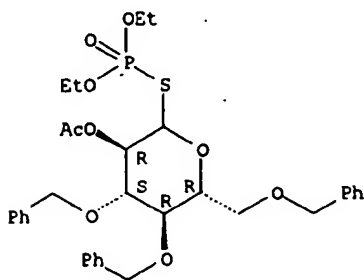
LEE 09/413,381



RN 262590-88-5 HCAPLUS

CN D-Glucopyranose, 3,4,6-tris-O-(phenylmethyl)-1-thio-, 2-acetate 1-(diethyl phosphate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

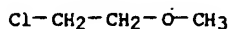


=> d bib abs hitstr 15 2

L5 ANSWER 2 OF 4 HCAPLUS COPYRIGHT 2000 ACS
 AN 1999:694715 HCAPLUS
 DN 132:93556
 TI Solid-Phase Oligosaccharide Synthesis: Preparation of Complex Structures Using a Novel Linker and Different Glycosylating Agents
 AU Andrade, Rodrigo B.; Plante, Obadiah J.; Melean, Luis G.; Seeberger, Peter E.
 CS Department of Chemistry, Massachusetts Institute of Technology, Cambridge, MA, 02139, USA
 SO Org. Lett. (1999), 1(11), 1811-1814
 CODEN: ORLEF7; ISSN: 1523-7060
 PB American Chemical Society
 DT Journal
 LA English
 OS CASREACT 132:93556
 AB A .beta.-(1.fwdarw.4)-linked trisaccharide was prepd. in 53% yield on a polymer support using glycosyl phosphates and released by cross-metathesis of a novel linker to reveal the anomeric n-pentenyl glycoside. Heptasaccharide was prepd. in 9% yield in 14 steps.
 IT 111-78-4, 1,5-Cyclooctadiene 627-42-9, 2-Chloroethyl methyl ether 129163-12-8 172222-30-9, Grubbs' ruthenium catalyst 253683-26-0 253683-40-8D, Merrifield resin bound 253683-41-9
 RL: RCT (Reactant)
 (solid phase oligosaccharide synthesis using a novel linker and different glycosylating agents)
 RN 111-78-4 HCAPLUS
 CN 1,5-Cyclooctadiene (6CI, 8CI, 9CI) (CA INDEX NAME)

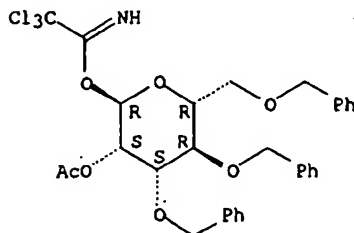


RN 627-42-9 HCAPLUS
 CN Ethane, 1-chloro-2-methoxy- (9CI) (CA INDEX NAME)

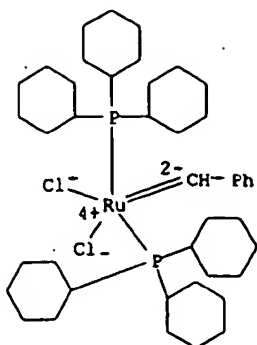


RN 129163-12-8 HCAPLUS
 CN .alpha.-D-Mannopyranose, 3,4,6-tris-O-(phenylmethyl)-, 2-acetate 1-(2,2,2-trichloroethanimidate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.



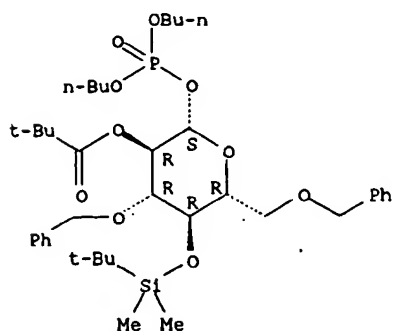
RN 172222-30-9 HCAPLUS
 CN Ruthenium, dichloro(phenylmethylene)bis(tricyclohexylphosphine)-, (SP-5-31)- (9CI) (CA INDEX NAME)



RN 253683-26-0 HCAPLUS

CN .beta.-D-Glucopyranose, 4-O-((1,1-dimethylethyl)dimethylsilyl)-3,6-bis-O-(phenylmethyl)-, 1-(dibutyl phosphate) 2-(2,2-dimethylpropanoate) (9CI)
(CA INDEX NAME)

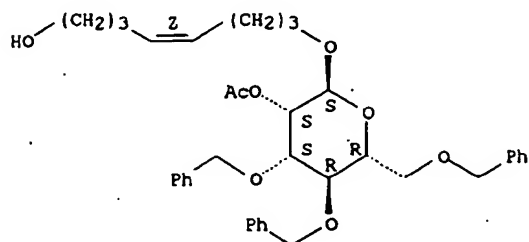
Absolute stereochemistry. Rotation (+).



RN 253683-40-8 HCAPLUS

CN .alpha.-D-Mannopyranoside, (4Z)-8-hydroxy-4-octenyl 3,4,6-tris-O-(phenylmethyl)-, 2-acetate (9CI) (CA INDEX NAME)

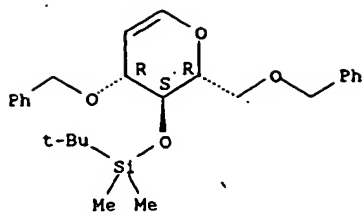
Absolute stereochemistry.
Double bond geometry as shown.



RN 253683-41-9 HCAPLUS

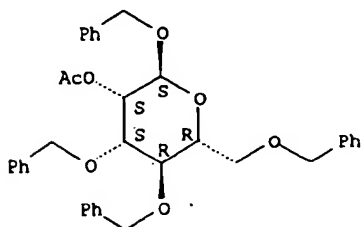
CN D-arabino-Hex-1-enitol, 1,5-anhydro-2-deoxy-4-O-((1,1-dimethylethyl)dimethylsilyl)-3,6-bis-O-(phenylmethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



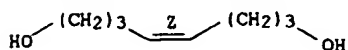
IT 61134-29-0P 62422-45-1DP, Merrifield resin bound
 62422-45-1P 143706-45-0P 253683-23-7P
 253683-24-8P 253683-25-9P 253683-27-1DP,
 Merrifield resin bound 253683-28-2P 253683-39-5P
 254442-15-4DP, Merrifield resin bound 254442-16-5DP,
 Merrifield resin bound 254442-17-6DP, Merrifield resin bound
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
 (solid phase oligosaccharide synthesis using a novel linker and
 different glycosylating agents)
 RN 61134-29-0 HCAPLUS
 CN .alpha.-D-Mannopyranoside, phenylmethyl 3,4,6-tris-O-(phenylmethyl)-,
 acetate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



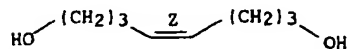
RN 62422-45-1 HCAPLUS
 CN 4-Octene-1,8-diol, (4Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



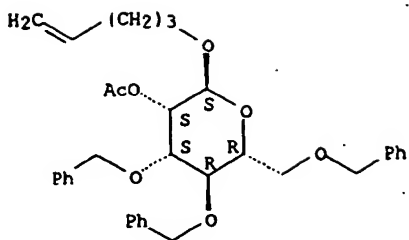
RN 62422-45-1 HCAPLUS
 CN 4-Octene-1,8-diol, (4Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



RN 143706-45-0 HCAPLUS
 CN .alpha.-D-Mannopyranoside, 4-pentenyl 3,4,6-tris-O-(phenylmethyl)-,
 acetate (9CI) (CA INDEX NAME)

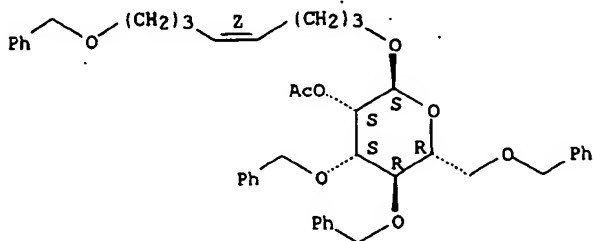
Absolute stereochemistry.



RN 253683-23-7 HCAPLUS

CN .alpha.-D-Mannopyranoside, (4Z)-8-(phenylmethoxy)-4-octenyl
3,4,6-tris-O-(phenylmethyl)-, acetate (9CI) (CA INDEX NAME)

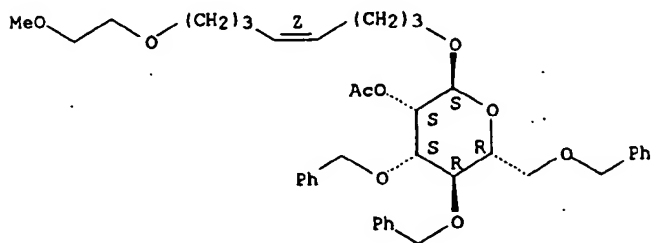
Absolute stereochemistry. Rotation (+).
Double bond geometry as shown.



RN 253683-24-8 HCAPLUS

CN .alpha.-D-Mannopyranoside, (4Z)-8-(2-methoxyethoxy)-4-octenyl
3,4,6-tris-O-(phenylmethyl)-, acetate (9CI) (CA INDEX NAME)

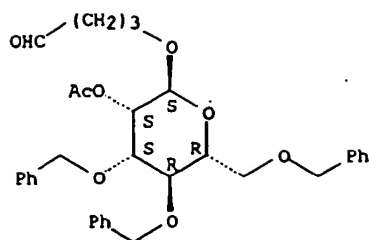
Absolute stereochemistry. Rotation (+).
Double bond geometry as shown.



RN 253683-25-9 HCAPLUS

CN Butanal, 4-[[2-O-acetyl-3,4,6-tris-O-(phenylmethyl)-.alpha.-D-mannopyranosyl]oxy]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

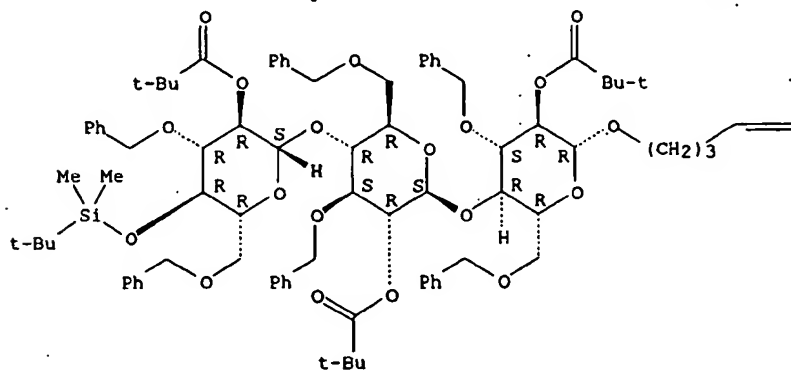


RN 253683-27-1 HCAPLUS

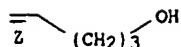
CN .beta.-D-Glucopyranoside, (4Z)-8-hydroxy-4-octenyl O-4-O-[(1,1-dimethylethyl)dimethylsilyl]-2-O-(2,2-dimethyl-1-oxopropyl)-3,6-bis-O-(phenylmethyl)-.beta.-D-glucopyranosyl-(1.fwdarw.4)-O-2-O-(2,2-dimethyl-1-oxopropyl)-3,6-bis-O-(phenylmethyl)-.beta.-D-glucopyranosyl-(1.fwdarw.4)-3,6-bis-O-(phenylmethyl)-, 2-(2,2-dimethylpropanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

PAGE 1-A



PAGE 1-B

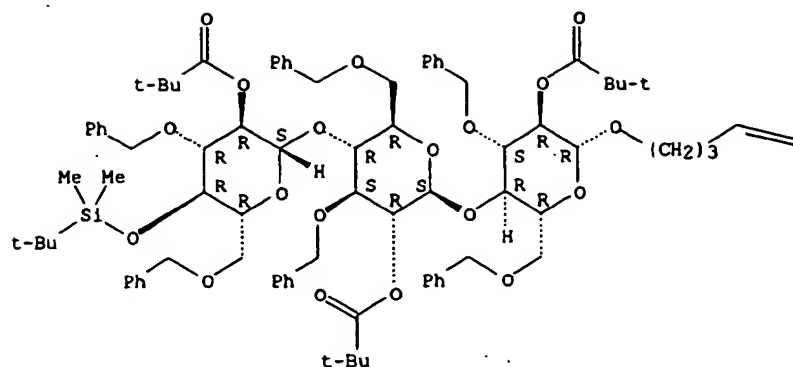


RN 253683-28-2 HCAPLUS

CN .beta.-D-Glucopyranoside, 4-pentenyl O-4-O-[(1,1-dimethylethyl)dimethylsilyl]-2-O-(2,2-dimethyl-1-oxopropyl)-3,6-bis-O-(phenylmethyl)-.beta.-D-glucopyranosyl-(1.fwdarw.4)-O-2-O-(2,2-dimethyl-1-oxopropyl)-3,6-bis-O-(phenylmethyl)-.beta.-D-glucopyranosyl-(1.fwdarw.4)-3,6-bis-O-(phenylmethyl)-, 2,2-dimethylpropanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

PAGE 1-A



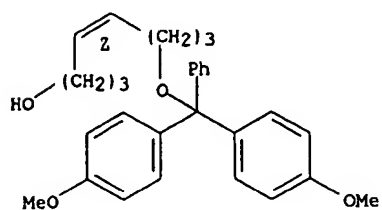
PAGE 1-B

=CH₂

RN 253683-39-5 HCAPLUS

CN 4-Octen-1-ol, 8-[bis(4-methoxyphenyl)phenylmethoxy]-, (4Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

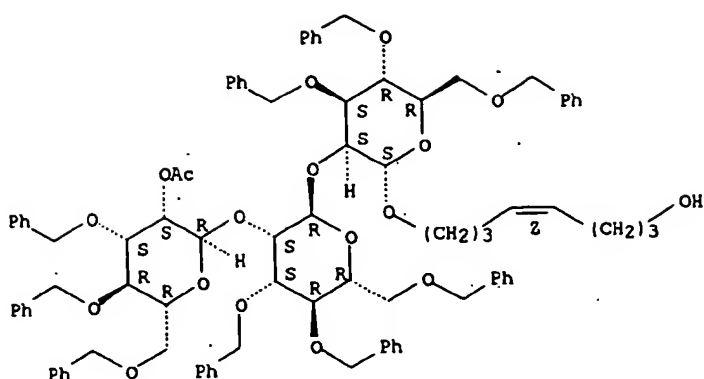


RN 254442-15-4 HCAPLUS

CN .alpha.-D-Mannopyranoside, (4Z)-8-hydroxy-4-octenyl O-2-O-acetyl-3,4,6-tris-O-(phenylmethyl)-.alpha.-D-mannopyranosyl-(1.fwdarw.2)-O-3,4,6-tris-O-(phenylmethyl)-.alpha.-D-mannopyranosyl-(1.fwdarw.2)-3,4,6-tris-O-(phenylmethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

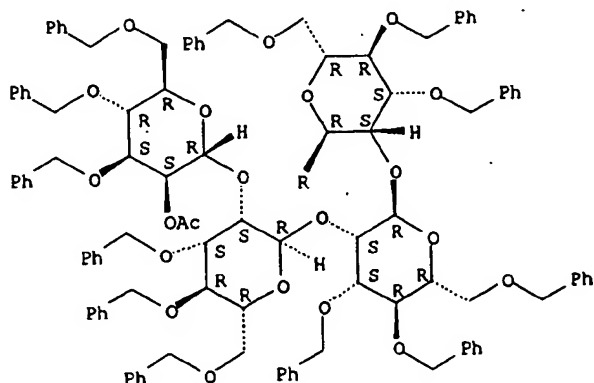
Double bond geometry as shown.



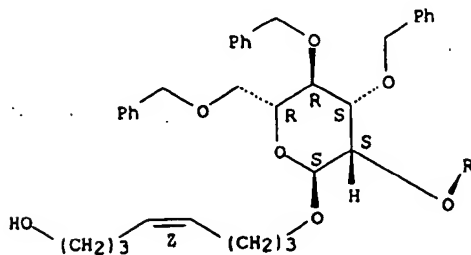
RN 254442-16-5 HCAPLUS
 CN .alpha.-D-Mannopyranoside, (4Z)-8-hydroxy-4-octenyl O-2-O-acetyl-3,4,6-tris-O-(phenylmethyl)-.alpha.-D-mannopyranosyl-(1.fwdarw.2)-O-3,4,6-tris-O-(phenylmethyl)-.alpha.-D-mannopyranosyl-(1.fwdarw.2)-O-3,4,6-tris-O-(phenylmethyl)-.alpha.-D-mannopyranosyl-(1.fwdarw.2)-O-3,4,6-tris-O-(phenylmethyl)-.alpha.-D-mannopyranosyl-(1.fwdarw.2)-3,4,6-tris-O-(phenylmethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry as shown.

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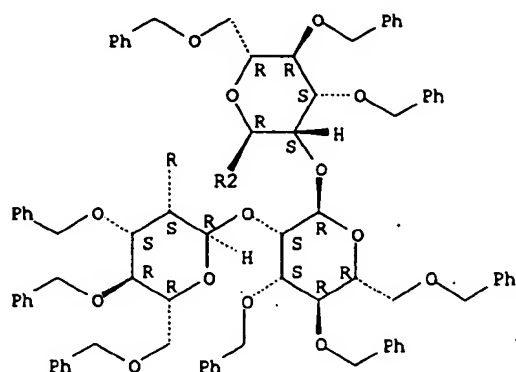
RN 254442-17-6 HCAPLUS
 CN .alpha.-D-Mannopyranoside, (4Z)-8-hydroxy-4-octenyl O-2-O-acetyl-3,4,6-tris-O-(phenylmethyl)-.alpha.-D-mannopyranosyl-(1.fwdarw.2)-O-3,4,6-tris-O-(phenylmethyl)-.alpha.-D-mannopyranosyl-(1.fwdarw.2)-O-3,4,6-tris-O-(phenylmethyl)-.alpha.-D-mannopyranosyl-(1.fwdarw.2)-3,4,6-tris-O-(phenylmethyl)- (9CI) (CA INDEX NAME)

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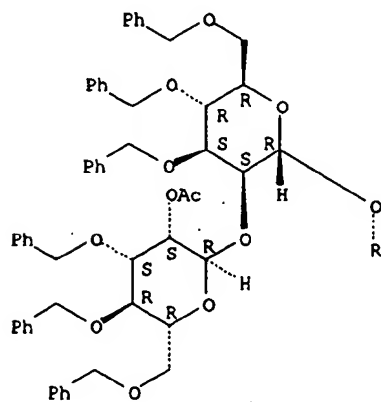
tris-O-(phenylmethyl)-.alpha.-D-mannopyranosyl-(1.fwdarw.2)-O-3,4,6-tris-O-(phenylmethyl)-.alpha.-D-mannopyranosyl-(1.fwdarw.2)-O-3,4,6-tris-O-(phenylmethyl)-.alpha.-D-mannopyranosyl-(1.fwdarw.2)-O-3,4,6-tris-O-(phenylmethyl)-.alpha.-D-mannopyranosyl-(1.fwdarw.2)-O-3,4,6-tris-O-(phenylmethyl)-.alpha.-D-mannopyranosyl-(1.fwdarw.2)- (9CI) (CA INDEX NAME)

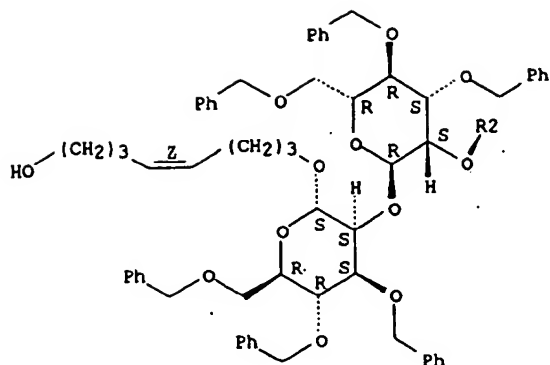
Absolute stereochemistry.
Double bond geometry as shown.

PAGE 1-A



PAGE 2-A





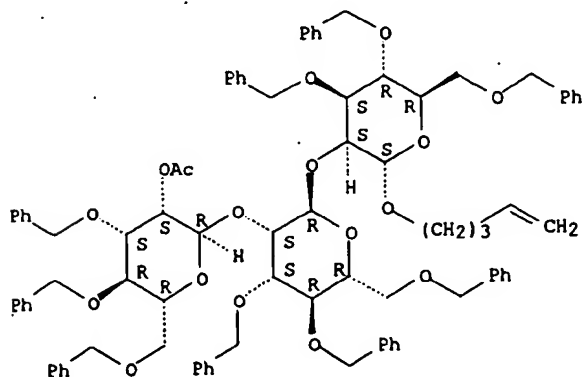
IT 143706-52-9P 253683-29-3P 253683-35-1P
253683-36-2P 253683-37-3P 253683-38-4P

RL: SPN (Synthetic preparation); PREP (Preparation)
(solid phase oligosaccharide synthesis using a novel linker and
different glycosylating agents)

RN 143706-52-9 HCAPLUS

CN .alpha.-D-Mannopyranoside, 4-pentenyl O-2-O-acetyl-3,4,6-tris-O-
(phenylmethyl)-.alpha.-D-mannopyranosyl-(1.fwdarw.2)-O-3,4,6-tris-O-
(phenylmethyl)-.alpha.-D-mannopyranosyl-(1.fwdarw.2)-3,4,6-tris-O-
(phenylmethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

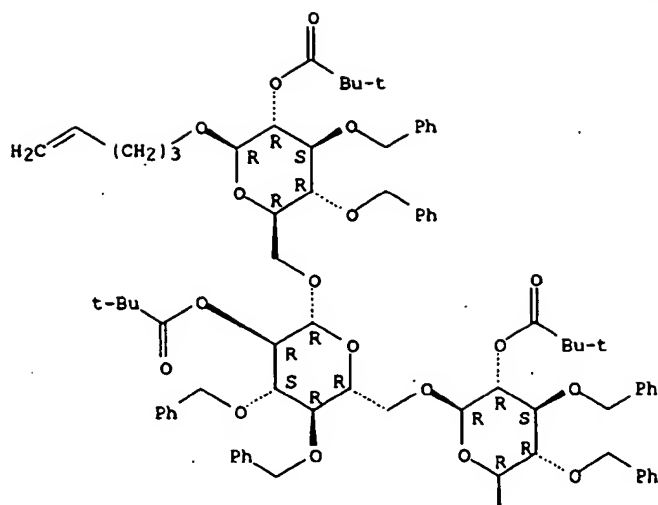


RN 253683-29-3 HCAPLUS

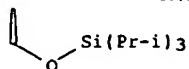
CN .beta.-D-Glucopyranoside, 4-pentenyl O-2-O-(2,2-dimethyl-1-oxopropyl)-3,4-
bis-O-(phenylmethyl)-6-O-(tris(1-methylethyl)silyl)-.beta.-D-
glucopyranosyl-(1.fwdarw.6)-O-2-O-(2,2-dimethyl-1-oxopropyl)-3,4-bis-O-
(phenylmethyl)-.beta.-D-glucopyranosyl-(1.fwdarw.6)-3,4-bis-O-
(phenylmethyl)-, 2,2-dimethylpropanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A

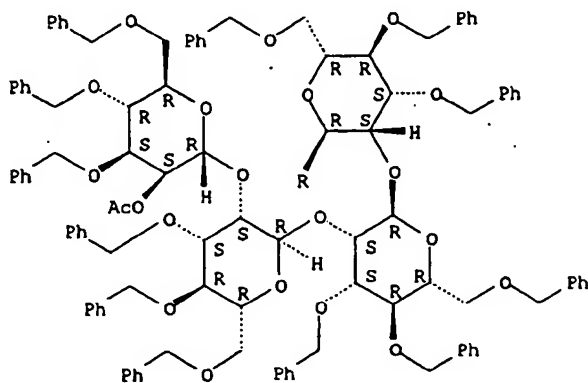


RN 253683-35-1 HCAPLUS

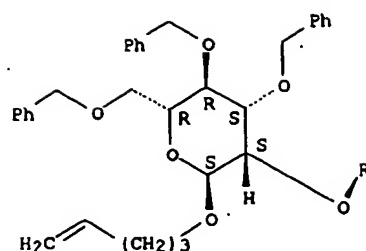
CN .alpha.-D-Mannopyranoside, 4-pentenyl O-2-O-acetyl-3,4,6-tris-O-(phenylmethyl)-.alpha.-D-mannopyranosyl-(1.fwdarw.2)-O-3,4,6-tris-O-(phenylmethyl)-.alpha.-D-mannopyranosyl-(1.fwdarw.2)-O-3,4,6-tris-O-(phenylmethyl)-.alpha.-D-mannopyranosyl-(1.fwdarw.2)-O-3,4,6-tris-O-(phenylmethyl)-.alpha.-D-mannopyranosyl-(1.fwdarw.2)-3,4,6-tris-O-(phenylmethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



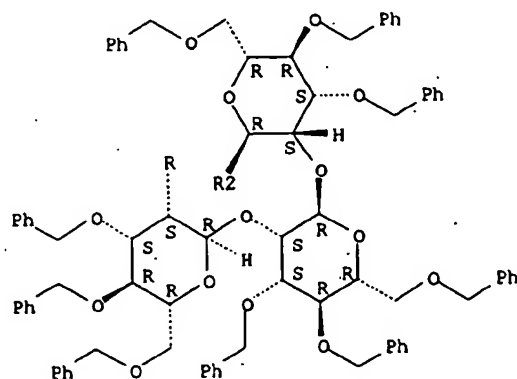
PAGE 2-A



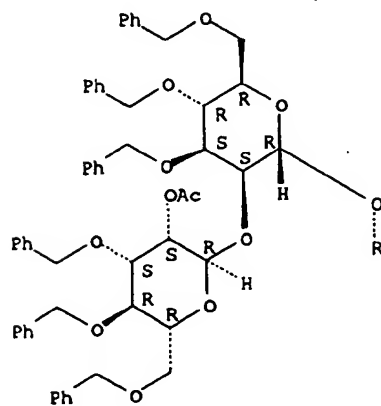
RN 253683-36-2 HCAPLUS
 CN .alpha.-D-Mannopyranoside, 4-pentenyl O-2-O-acetyl-3,4,6-tris-O-(phenylmethyl)-.alpha.-D-mannopyranosyl-(1.fwdarw.2)-O-3,4,6-tris-O-(phenylmethyl)-.alpha.-D-mannopyranosyl-(1.fwdarw.2)-O-3,4,6-tris-O-(phenylmethyl)-.alpha.-D-mannopyranosyl-(1.fwdarw.2)-O-3,4,6-tris-O-(phenylmethyl)-.alpha.-D-mannopyranosyl-(1.fwdarw.2)-O-3,4,6-tris-O-(phenylmethyl)-.alpha.-D-mannopyranosyl-(1.fwdarw.2)-O-3,4,6-tris-O-(phenylmethyl)-.alpha.-D-mannopyranosyl-(1.fwdarw.2)-O-3,4,6-tris-O-(phenylmethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



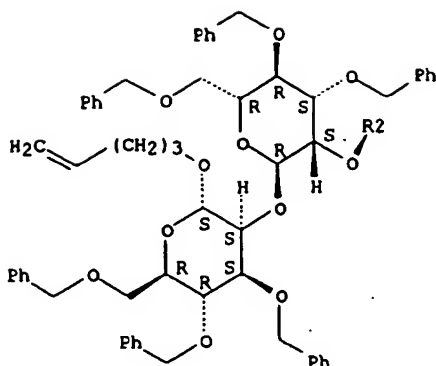
PAGE 2-A



SEARCHED BY SUSAN HANLEY 305-4053

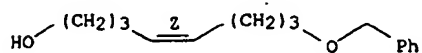
Page 24

PAGE 3-A



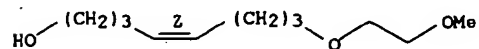
RN 253683-37-3 HCAPLUS
 CN 4-Octen-1-ol, 8-(phenylmethoxy)-, (4Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



RN 253683-38-4 HCAPLUS
 CN 4-Octen-1-ol, 8-(2-methoxyethoxy)-, (4Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



RE.CNT 50

RE

- (1) Adinolfi, M; Tetrahedron Lett 1996, V37, P5007 HCAPLUS
 - (2) Adinolfi, M; Tetrahedron Lett 1998, V39, P1953 HCAPLUS
 - (6) Caruthers, M; Science 1985, V230, P281 HCAPLUS
 - (7) Danishefsky, S; Science 1993, V260, P1307 HCAPLUS
 - (8) Douglas, S; J Am Chem Soc 1995, V117, P2116 HCAPLUS
- ALL CITATIONS AVAILABLE IN THE RE FORMAT

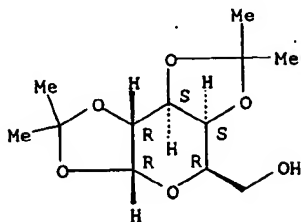
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L5 ANSWER 3 OF 4 HCAPLUS COPYRIGHT 2000 ACS
 AN 1999:334357 HCAPLUS
 DN 131:73867
 TI Synthesis and Use of Glycosyl Phosphates as Glycosyl Donors
 AU Plante, Obadiah J.; Andrade, Rodrigo B.; Seeberger, Peter
 R.
 CS Department of Chemistry, Massachusetts Institute of Technology, Cambridge,
 MA, 02139, USA
 SO Org. Lett. (1999), 1(2), 211-214
 CODEN: ORLEF7; ISSN: 1523-7060
 PB American Chemical Society
 DT Journal
 LA English
 AB Differentially protected glycosyl phosphates prepd. by a straightforward
 synthesis from glycal precursors are used as powerful glycosyl donors.
 Activation of .beta.-glycosyl phosphates by TMSOTf at -78 .degree.C
 achieves the selective formation of .beta.-glycosidic linkages in
 excellent yields with complete stereoselectivity. Reaction with thiols
 results in the conversion of glycosyl phosphates into thioglycosides in
 nearly quant. yield. An orthogonal coupling strategy using glycosyl
 phosphate donors and thioethyl glycoside acceptors allows for the rapid
 synthesis of a trisaccharide.
 IT 75-08-1, Ethanethiol 4064-06-6 40246-30-8
 55628-54-1 80040-79-5 114117-12-3
 145852-76-2 196703-95-4 226919-70-6
 226919-85-3
 RL: RCT (Reactant)
 (prepn. and use of glycosyl phosphates as glycosyl donors)
 RN 75-08-1 HCAPLUS
 CN Ethanethiol (8CI, 9CI) (CA INDEX NAME)

H₃C-CH₂-SH

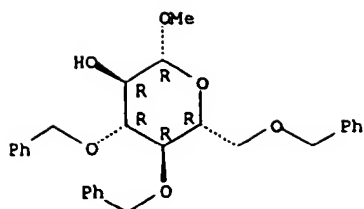
RN 4064-06-6 HCAPLUS
 CN .alpha.-D-Galactopyranose, 1;2:3,4-bis-O-(1-methylethylidene)- (9CI) (CA
 INDEX NAME)

Absolute stereochemistry.



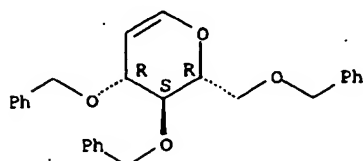
RN 40246-30-8 HCAPLUS
 CN .beta.-D-Glucopyranoside, methyl 3,4,6-tris-O-(phenylmethyl)- (9CI) (CA
 INDEX NAME)

Absolute stereochemistry.



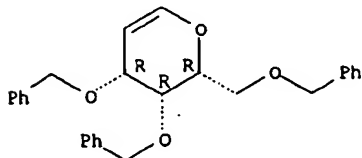
RN 55628-54-1 HCAPLUS
CN D-arabino-Hex-1-enitol, 1,5-anhydro-2-deoxy-3,4,6-tris-O-(phenylmethyl)-
(9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



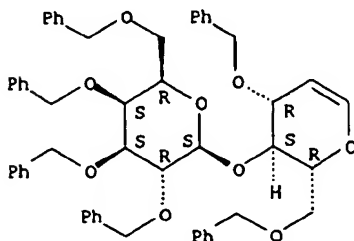
RN 80040-79-5 HCAPLUS
CN D-arabino-Hex-5-enitol, 2,6-anhydro-5-deoxy-1,3,4-tris-O-(phenylmethyl)-
(9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



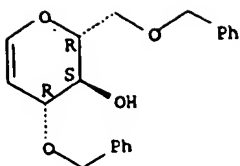
RN 114117-12-3 HCAPLUS
CN D-arabino-Hex-1-enitol, 1,5-anhydro-2-deoxy-3,6-bis-O-(phenylmethyl)-4-O-
[2,3,4,6-tetrakis-O-(phenylmethyl)-beta.-D-galactopyranosyl]- (9CI) (CA
INDEX NAME)

Absolute stereochemistry.



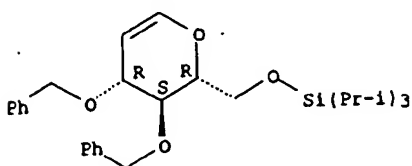
RN 145852-76-2 HCAPLUS
CN D-arabino-Hex-1-enitol, 1,5-anhydro-2-deoxy-3,6-bis-O-(phenylmethyl)-
(9CI) (CA INDEX NAME)

Absolute stereochemistry.



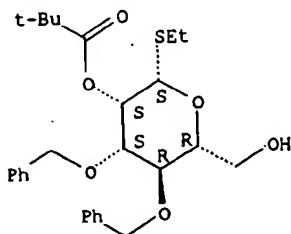
RN 196703-95-4 HCAPLUS
 CN D-arabino-Hex-1-enitol, 1,5-anhydro-2-deoxy-3,4-bis-O-(phenylmethyl)-6-O-
 [tris(1-methylethyl)silyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



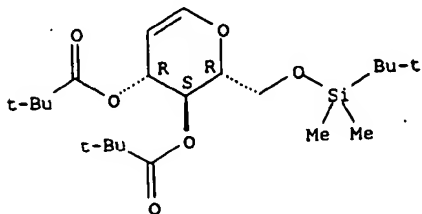
RN 226919-70-6 HCAPLUS
 CN .beta.-D-Mannopyranoside, ethyl 3,4-bis-O-(phenylmethyl)-1-thio-,
 2-(2,2-dimethylpropanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 226919-85-3 HCAPLUS
 CN D-arabino-Hex-1-enitol, 1,5-anhydro-2-deoxy-6-O-[(1,1-
 dimethylethyl)dimethylsilyl]-, bis(2,2-dimethylpropanoate) (9CI) (CA
 INDEX NAME)

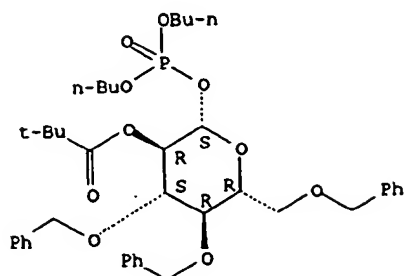
Absolute stereochemistry.



IT 226919-63-7P 226919-66-0P 226919-69-3P
 226919-73-9P 226919-79-5P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
 (prepn. and use of glycosyl phosphates as glycosyl donors)
 RN 226919-63-7 HCAPLUS
 CN .beta.-D-Glucopyranose, 3,4,6-tris-O-(phenylmethyl)-, 1-(dibutyl
 phosphate) 2-(2,2-dimethylpropanoate) (9CI) (CA INDEX NAME)

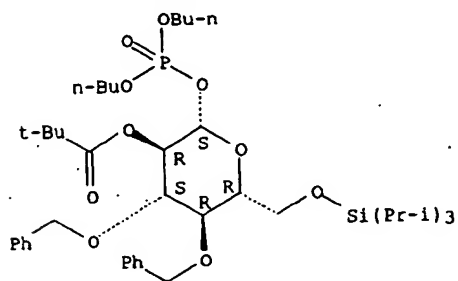
SEARCHED BY SUSAN HANLEY 305-4053

Absolute stereochemistry. Rotation (-).



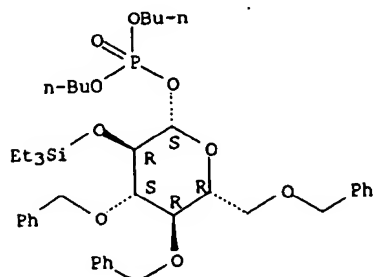
RN 226919-66-0 HCAPLUS
 CN .beta.-D-Glucopyranose, 3,4-bis-O-(phenylmethyl)-6-O-{tris(1-methylethyl)silyl}-, 1-(dibutyl phosphate) 2-(2,2-dimethylpropanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



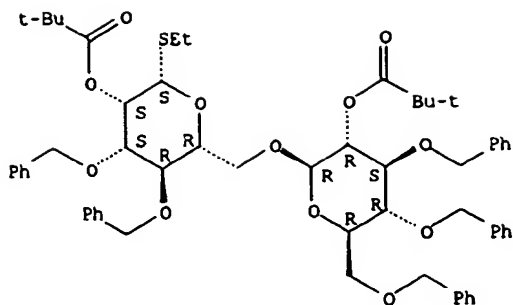
RN 226919-69-3 HCAPLUS
 CN .beta.-D-Glucopyranose, 3,4,6-tris-O-(phenylmethyl)-2-O-(triethylsilyl)-, dibutyl phosphate (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



RN 226919-73-9 HCAPLUS
 CN .beta.-D-Mannopyranoside, ethyl 6-O-{2-O-(2,2-dimethyl-1-oxopropyl)-3,4,6-tris-O-(phenylmethyl)-.beta.-D-glucopyranosyl}-3,4-bis-O-(phenylmethyl)-1-thio-, 2,2-dimethylpropanoate (9CI) (CA INDEX NAME)

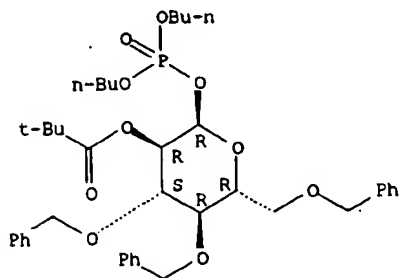
Absolute stereochemistry. Rotation (-).



RN 226919-79-5 HCAPLUS

CN .alpha.-D-Glucopyranose, 3,4,6-tris-O-(phenylmethyl)-, 1-(dibutyl phosphate) 2-(2,2-dimethylpropanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



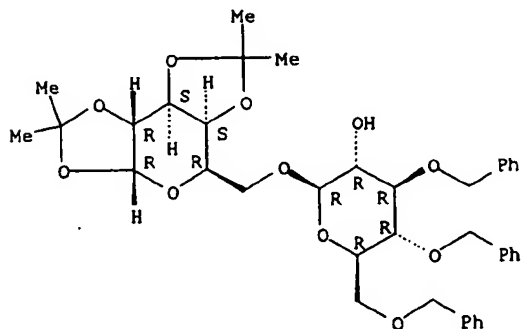
IT 40246-33-1P 201210-64-2P 219122-26-6P
 226919-62-6P 226919-64-8P 226919-65-9P
 226919-67-1P 226919-68-2P 226919-71-7P
 226919-72-8P 226919-76-2P 226919-78-4P
 226919-81-9P 226919-83-1P 226919-84-2P

RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. and use of glycosyl phosphates as glycosyl donors)

RN 40246-33-1 HCAPLUS

CN .alpha.-D-Galactopyranose, 1,2:3,4-bis-O-(1-methylethylidene)-6-O-[3,4,6-tris-O-(phenylmethyl)-.beta.-D-glucopyranosyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

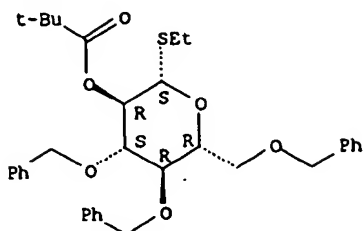


RN 201210-64-2 HCAPLUS

CN .beta.-D-Glucopyranoside, ethyl 3,4,6-tris-O-(phenylmethyl)-1-thio-,
 2,2-dimethylpropanoate (9CI) (CA INDEX NAME)

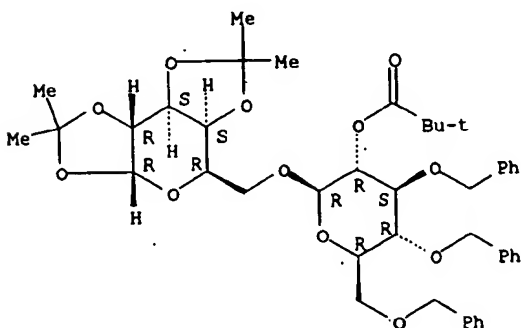
SEARCHED BY SUSAN HANLEY 305-4053

Absolute stereochemistry.



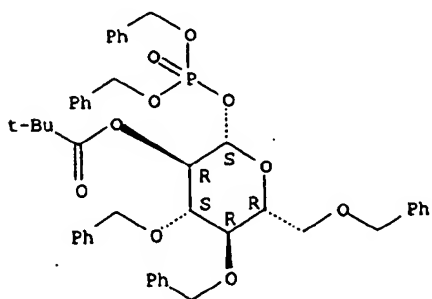
RN 219122-26-6 HCAPLUS
 CN .alpha.-D-Galactopyranose, 6-O-(2-O-(2,2-dimethyl-1-oxopropyl)-3,4,6-tris-O-(phenylmethyl)-.beta.-D-glucopyranosyl)-1,2:3,4-bis-O-(1-methylethylidene)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



RN 226919-62-6 HCAPLUS
 CN .beta.-D-Glucopyranose, 3,4,6-tris-O-(phenylmethyl)-, 1-[bis(phenylmethyl)phosphate] 2-(2,2-dimethylpropanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RN 226919-64-8 HCAPLUS
 CN .beta.-D-Galactopyranose, 3,4,6-tris-O-(phenylmethyl)-, 1-(dibutylphosphate) 2-(2,2-dimethylpropanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).